FIG. 1

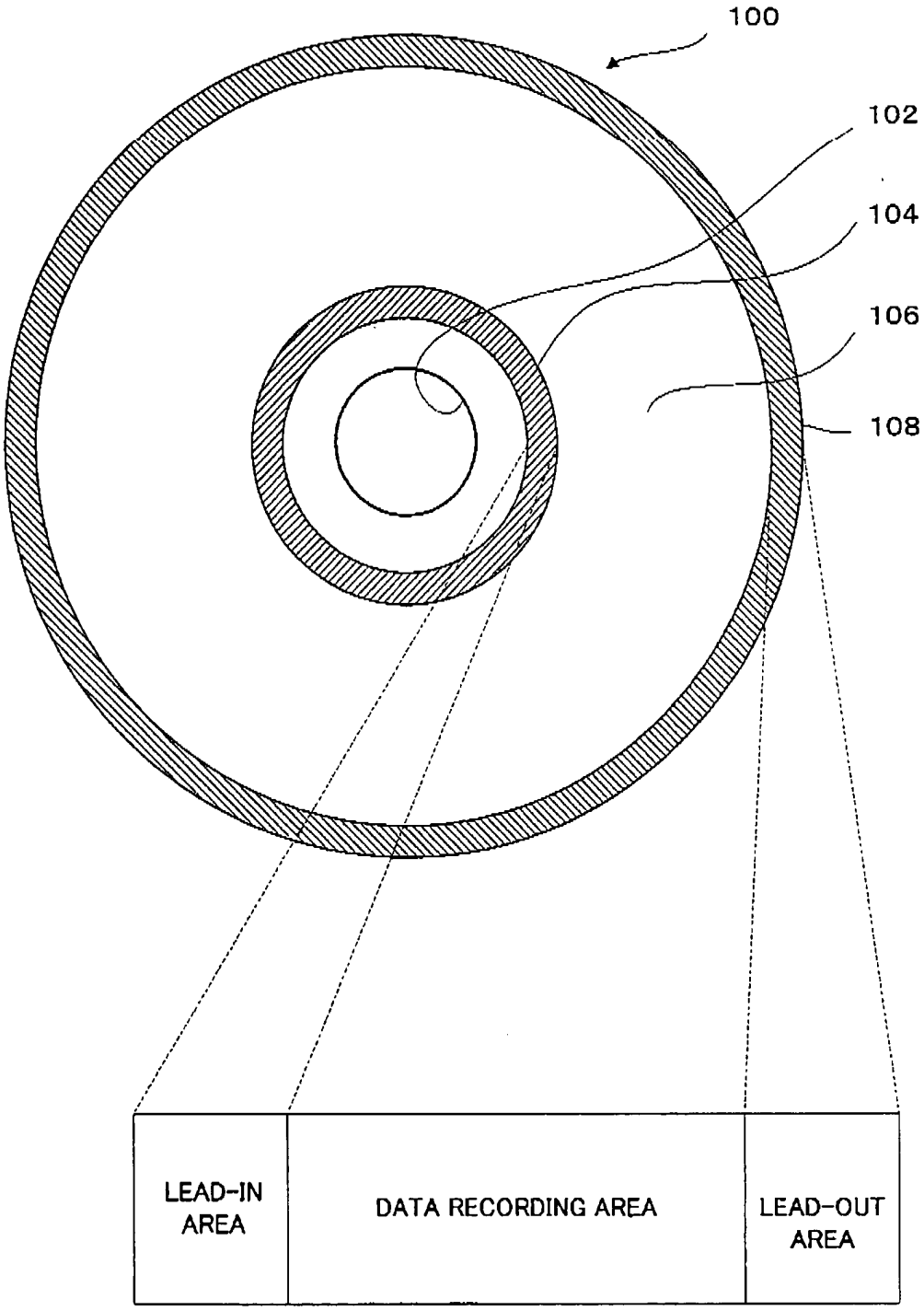
100
102
104
106
108
LEAD-IN AREA
DATA RECORDING AREA
LEAD-OUT AREA

FIG. 2

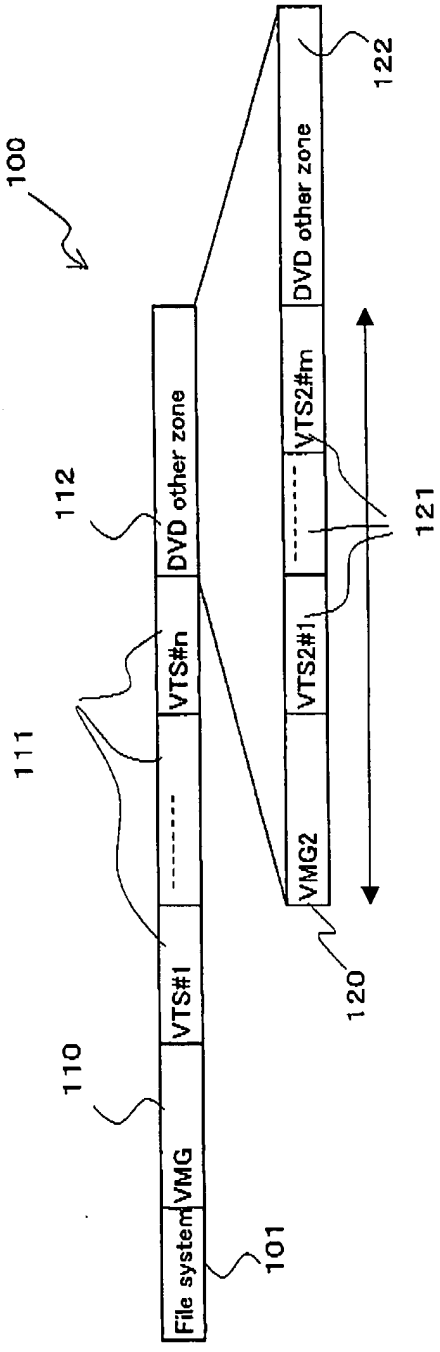
100
112
DVD other zone
VTS#n
111
VTS#1
110
VMG
File system
101
VMG2
VTS2#1
VTS2#m
DVD other zone
120
121
122

FIG. 3

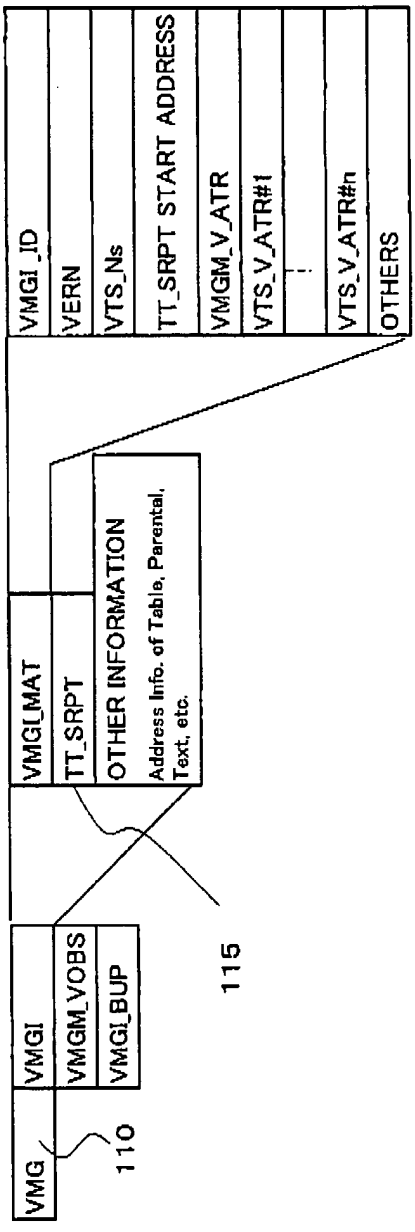
VMG
VMGI
VMGM_VOBS
VMGI_BUP
110
VMGI_MAT
TT_SRPT
OTHER INFORMATION
Address Info. of Table, Parental, Text, etc.
115
VMGI_ID
VERN
VTS_Ns
TT_SRPT START ADDRESS
VMGM_V_ATR
VTS_V_ATR#1
VTS_V_ATR#n
OTHERS

FIG. 4

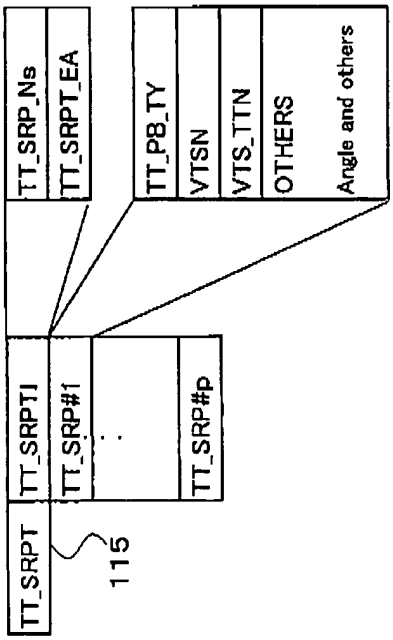
TT_SRPT
TT_SRPTI
TT_SRP#1
TT_SRP#p
115
TT_SRP_Ns
TT_SRPT_EA
TT_PB_TY
VTSN
VTS_TTN
OTHERS
Angle and others

FIG. 5

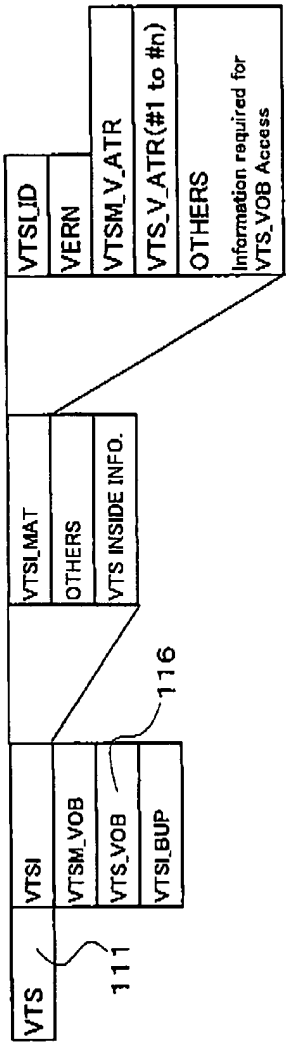
VTS
111
VTSI
VTSM_VOB
VTS_VOB
VTSI_BUP
116
VTSI_MAT
OTHERS
VTS INSIDE INFO.
VTSI_ID
VERN
VTSM_V_ATR
VTS_V_ATR(#1 to #n)
OTHERS
Information required for VTS_VOB Access

FIG. 6

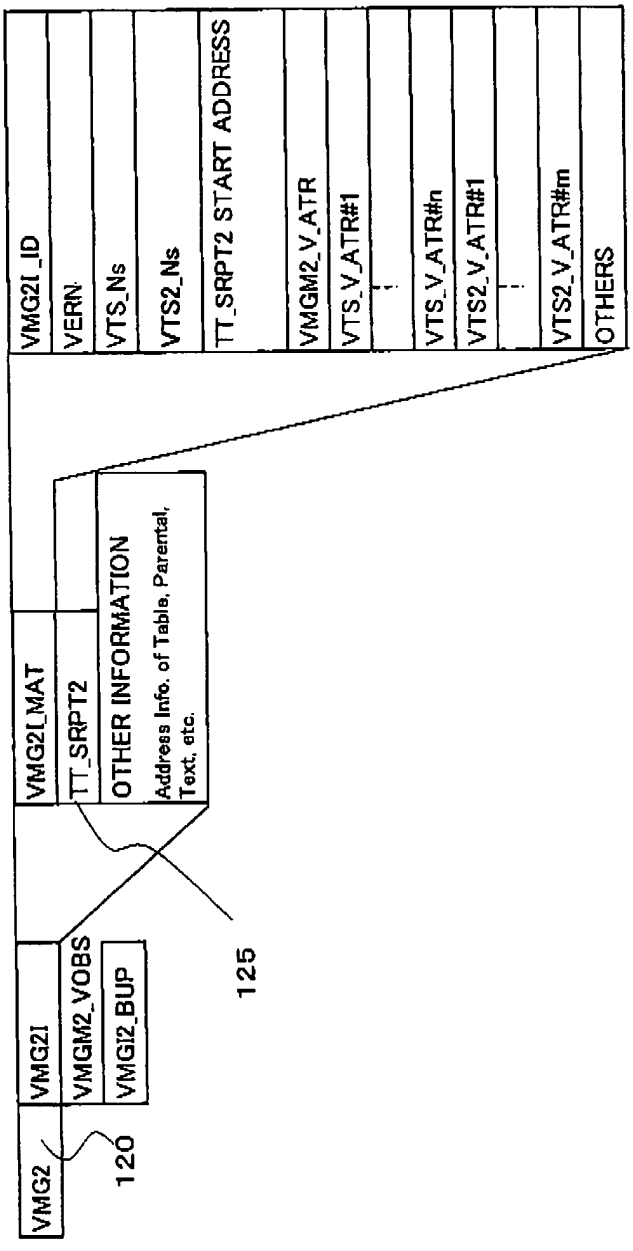
VMG2
VMG2I
VMGM2_VOBS
VMGI2_BUP
120
VMG2I_MAT
TT_SRPT2
OTHER INFORMATION
Address Info. of Table, Parental, Text, etc.
125
VMG2I_ID
VERN
VTS_Ns
VTS2_Ns
TT_SRPT2 START ADDRESS
VMGM2_V_ATR
VTS_V_ATR#1
VTS_V_ATR#n
VTS2_V_ATR#1
VTS2_V_ATR#m
OTHERS

FIG. 7

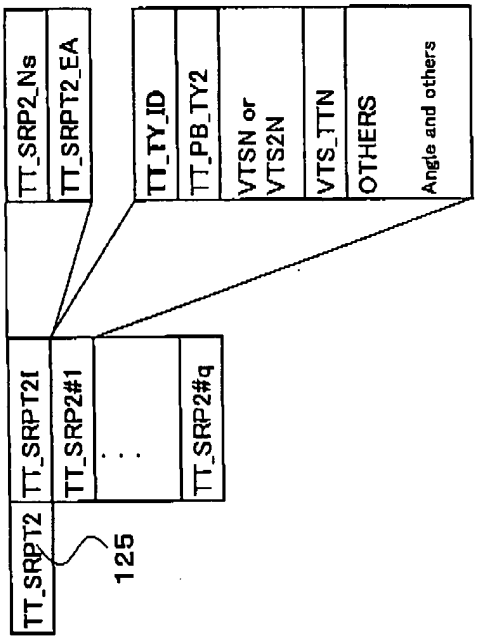
TT_SRPT2
TT_SRPT2I
TT_SRP2#1
. . .
TT_SRP2#q
125
TT_SRP2_Ns
TT_SRPT2_EA
TT_TY_ID
TT_PB_TY2
VTSN or VTS2N
VTS_TTN
OTHERS
Angle and others

FIG. 8

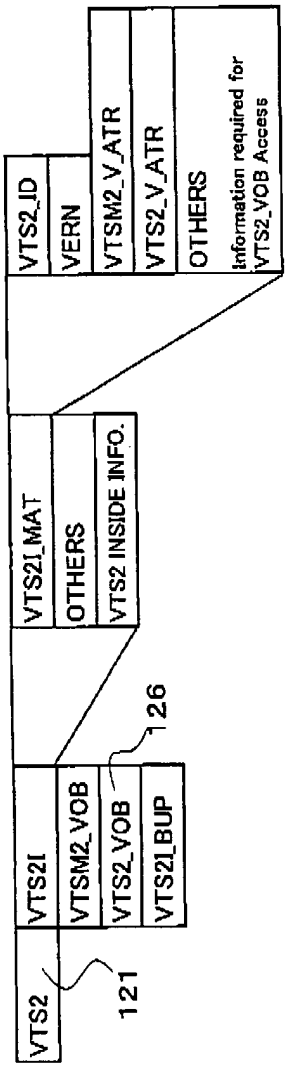
VTS2
VTS2I
VTSM2_VOB
VTS2_VOB
VTS2I_BUP
121
126
VTS2I_MAT
OTHERS
VTS2 INSIDE INFO.
VTS2_ID
VERN
VTSM2_V_ATR
VTS2_V_ATR
OTHERS
Information required for VTS2_VOB Access

FIG. 9

TITLE A :Based On Ver1.X (Old Type)
TITLE B :Based On Ver.2.0 (New Type)
TITLE C :Based On Ver1.X (Old Type)
TITLE D :Based On Ver1.X (Old Type)
TITLE E :Based On Ver.2.0 (New Type)

FIG. 10

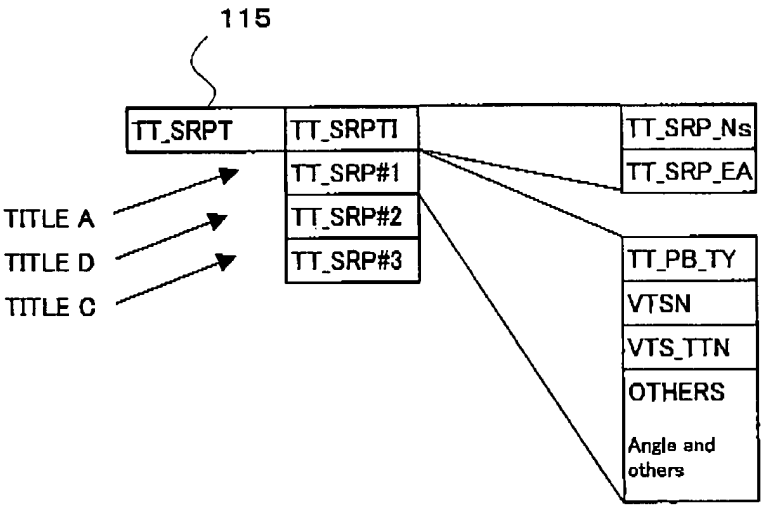

FIG. 11

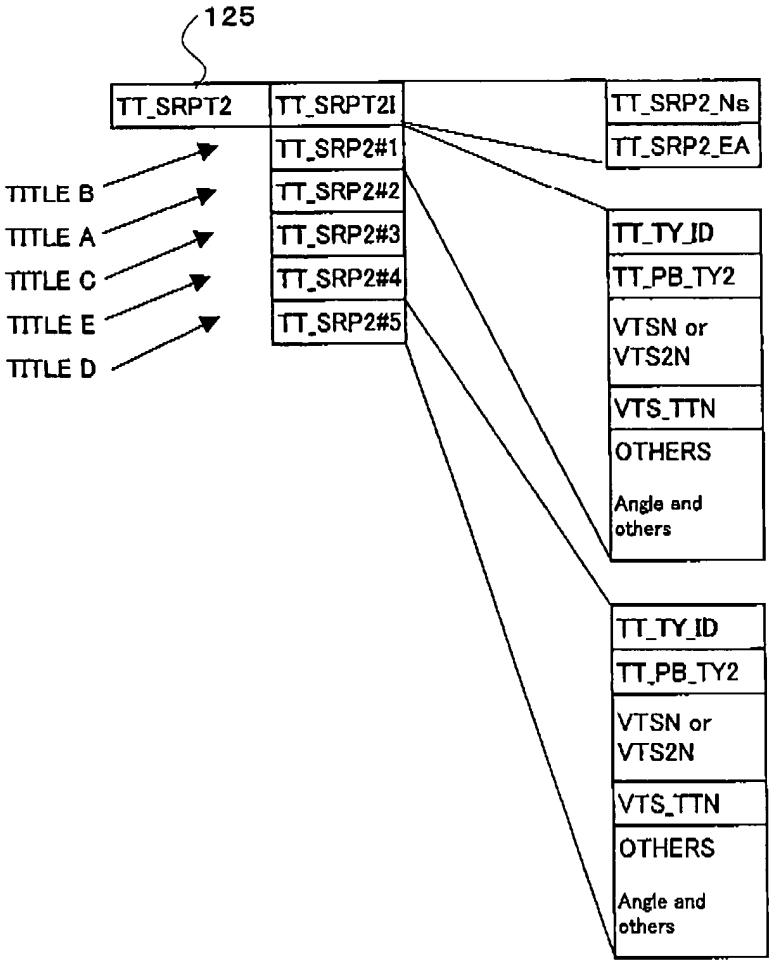
125
TT_SRPT2
TT_SRPT2I
TT_SRP2#1
TT_SRP2#2
TT_SRP2#3
TT_SRP2#4
TT_SRP2#5
TITLE B
TITLE A
TITLE C
TITLE E
TITLE D
TT_SRP2_Ns
TT_SRP2_EA
TT_TY_ID
TT_PB_TY2
VTSN or VTS2N
VTS_TTN
OTHERS
Angle and others
TT_TY_ID
TT_PB_TY2
VTSN or VTS2N
VTS_TTN
OTHERS
Angle and others

FIG. 12

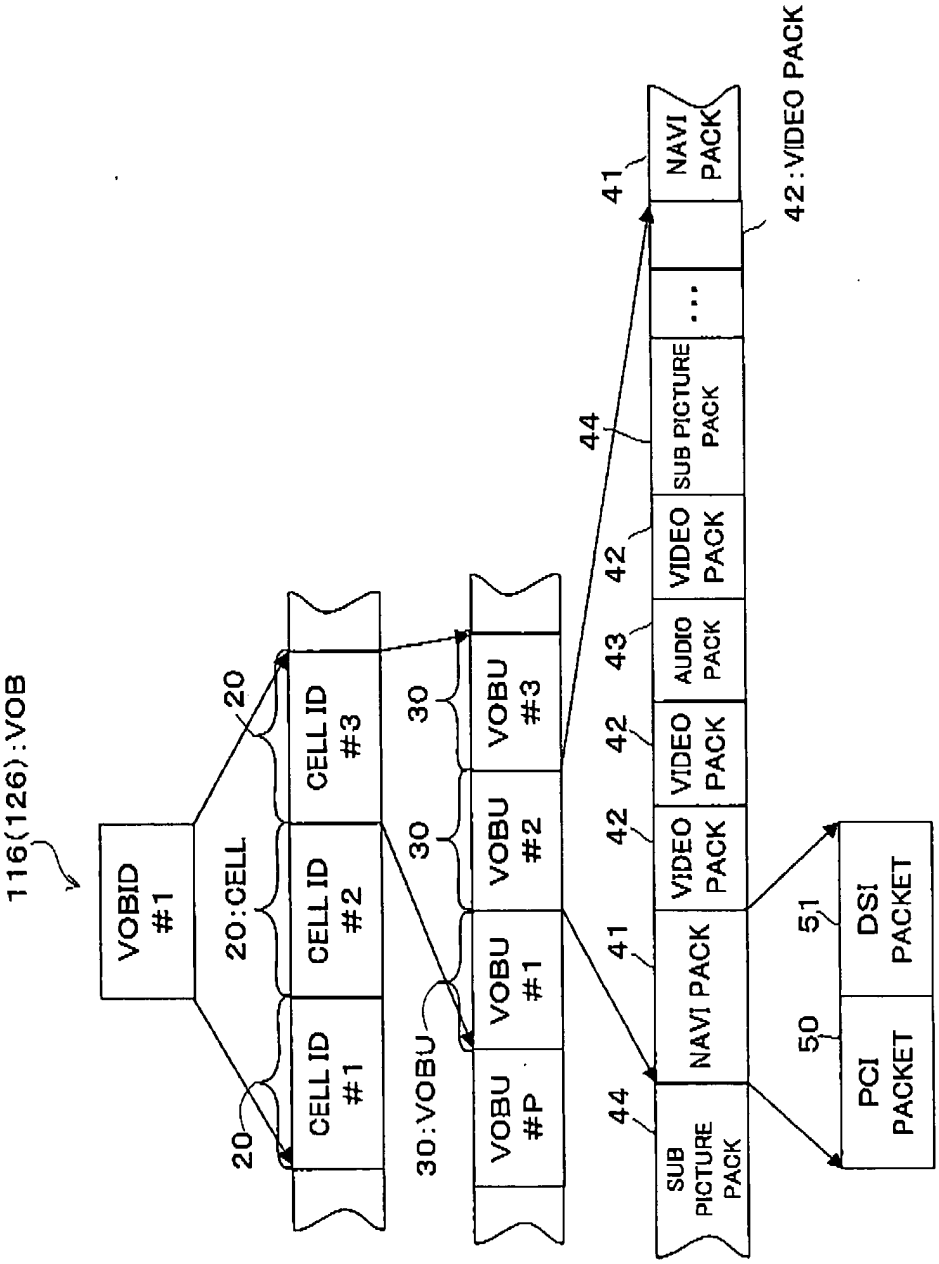
116(126):VOB
VOBID #1
20:CELL
20
CELL ID #1
CELL ID #2
CELL ID #3
30:VOBU
30
VOBU #P
VOBU #1
VOBU #2
VOBU #3
41
NAVI PACK
SUB PICTURE PACK
44
VIDEO PACK
42
AUDIO PACK
43
...
42:VIDEO PACK
50
PCI PACKET
51
DSI PACKET

FIG. 13

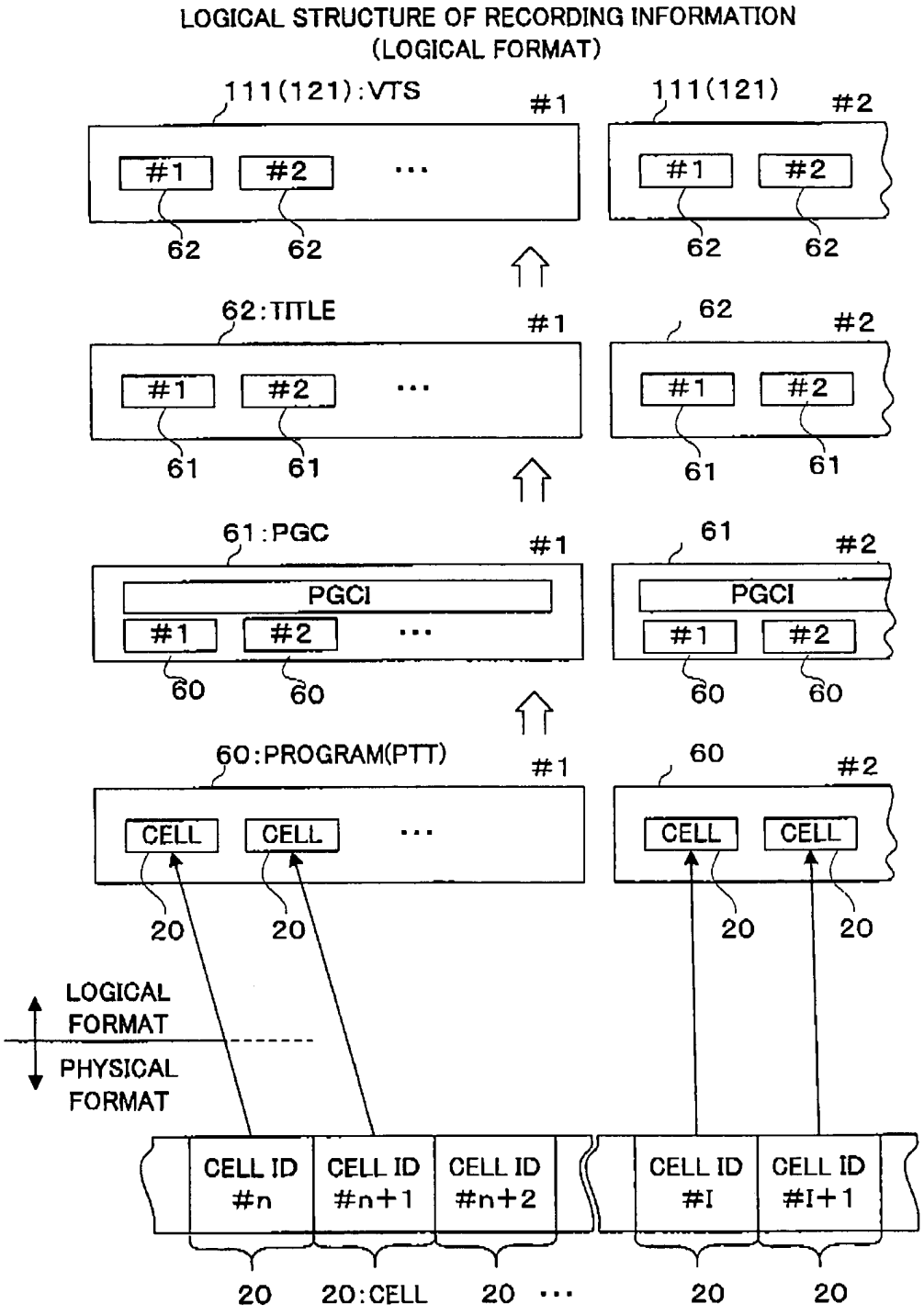
LOGICAL STRUCTURE OF RECORDING INFORMATION
(LOGICAL FORMAT)
111(121):VTS
#1
#2
62
62:TITLE
61
61:PGC
PGCI
60
60:PROGRAM(PTT)
CELL
20
LOGICAL FORMAT
PHYSICAL FORMAT
CELL ID #n
CELL ID #n+1
CELL ID #n+2
CELL ID #I
CELL ID #I+1
20:CELL

FIG. 14

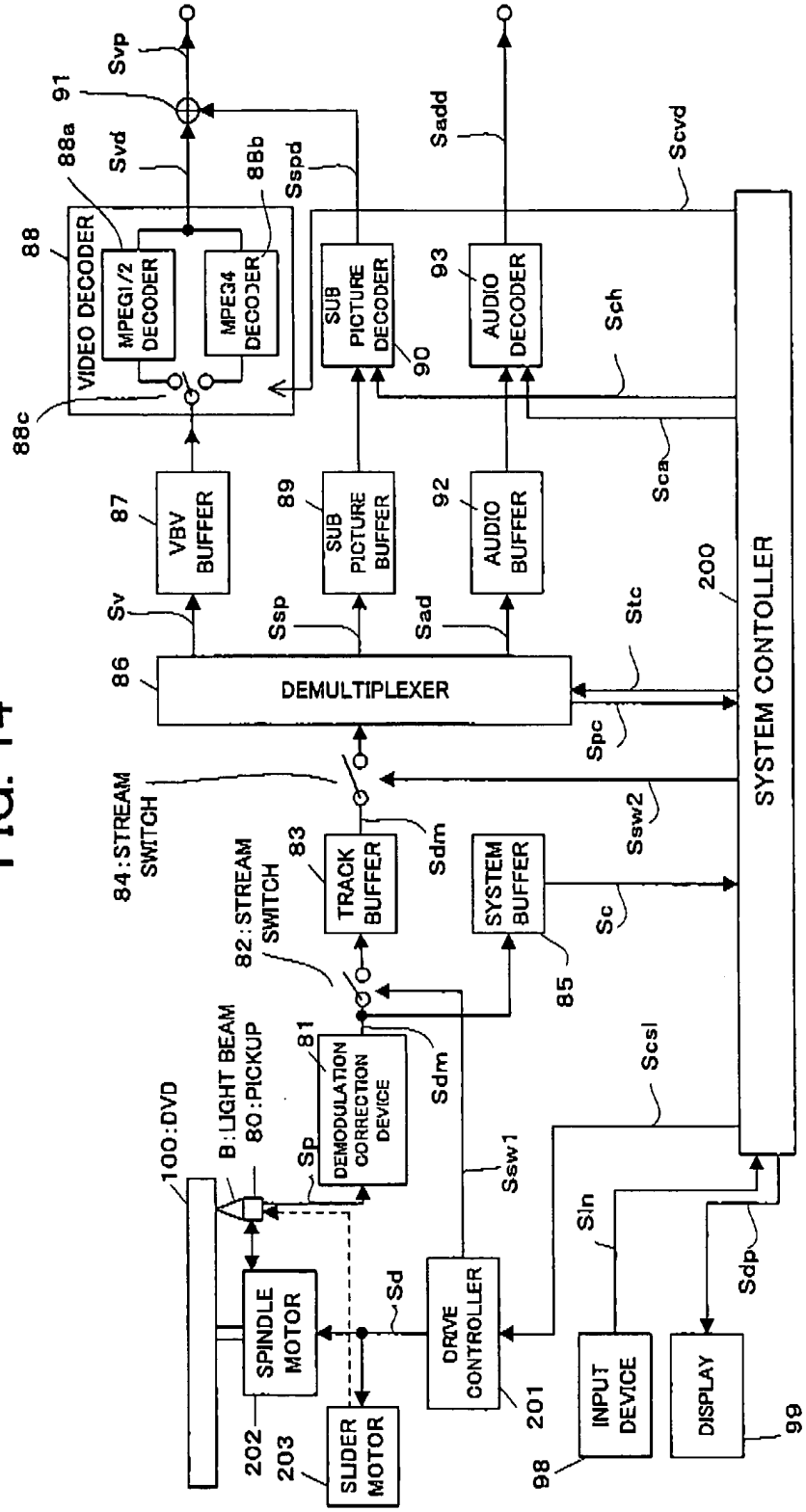
Svp
91
Svd
88a
88b
Sspd
Sadd
Scvd
88
VIDEO DECODER
MPEG1/2 DECODER
MPEG4 DECODER
SUB PICTURE DECODER
90
93
AUDIO DECODER
Sch
88c
87
VBV BUFFER
89
SUB PICTURE BUFFER
92
AUDIO BUFFER
Sca
200
SYSTEM CONTOLLER
Sv
Ssp
Sad
Stc
86
DEMULTIPLEXER
Spc
84:STREAM SWITCH
Ssw2
83
TRACK BUFFER
Sdm
SYSTEM BUFFER
Sc
82:STREAM SWITCH
85
100:DVD
B:LIGHT BEAM
80:PICKUP
81
DEMODULATION CORRECTION DEVICE
Sdm
Scsl
Sp
Ssw1
Sin
Sdp
Sd
SPINDLE MOTOR
DRIVE CONTROLLER
INPUT DEVICE
DISPLAY
202
203
SLIDER MOTOR
201
98
99

FIG. 15

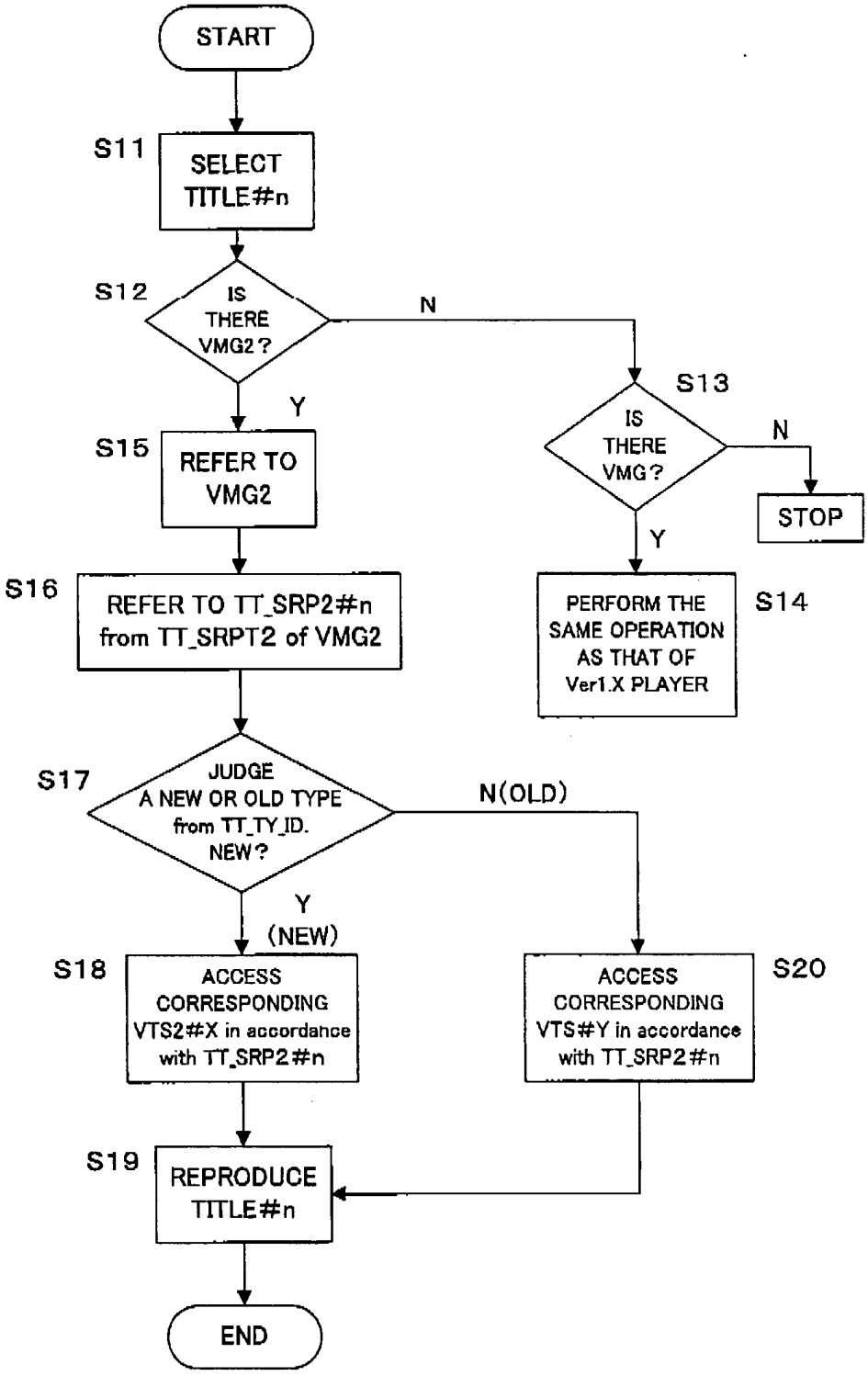
START
S11
SELECT TITLE#n
S12
IS THERE VMG2?
N
Y
S13
IS THERE VMG?
N
STOP
Y
S15
REFER TO VMG2
S16
REFER TO TT_SRP2#n from TT_SRPT2 of VMG2
PERFORM THE SAME OPERATION AS THAT OF Ver1.X PLAYER
S14
S17
JUDGE A NEW OR OLD TYPE from TT_TY_ID. NEW?
N(OLD)
Y (NEW)
S18
ACCESS CORRESPONDING VTS2#X in accordance with TT_SRP2#n
ACCESS CORRESPONDING VTS#Y in accordance with TT_SRP2#n
S20
S19
REPRODUCE TITLE#n
END

FIG. 16

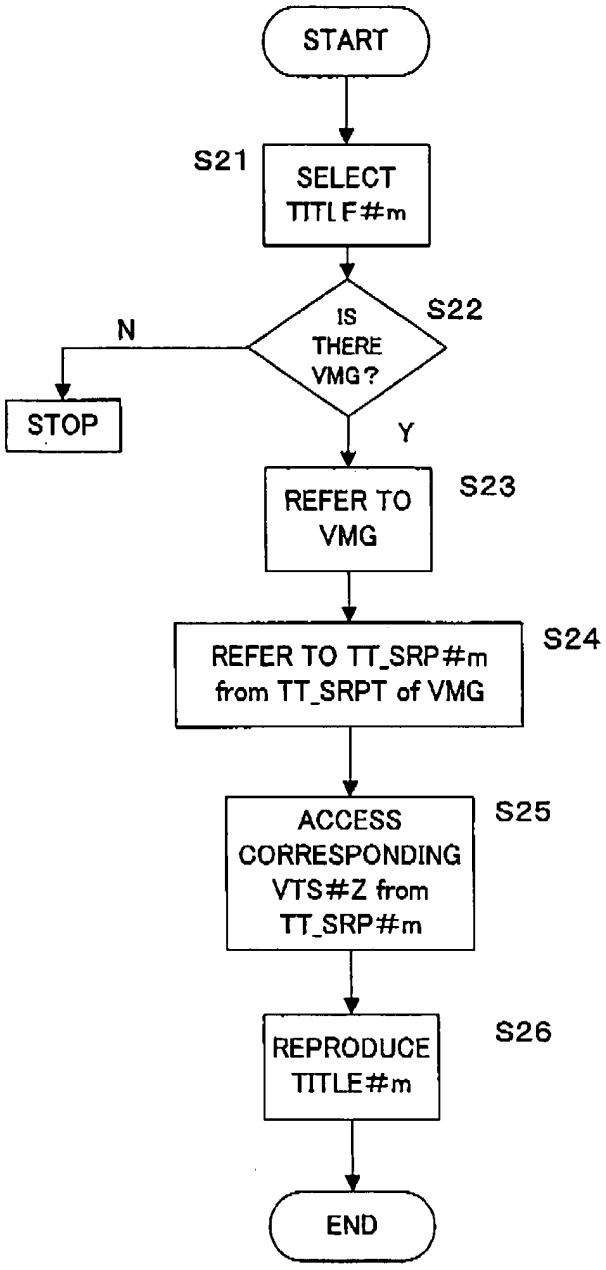
START
S21
SELECT TITLE#m
IS THERE VMG?
S22
N
STOP
Y
REFER TO VMG
S23
REFER TO TT_SRP#m from TT_SRPT of VMG
S24
ACCESS CORRESPONDING VTS#Z from TT_SRP#m
S25
REPRODUCE TITLE#m
S26
END

FIG. 17

DISC TYPE	VMG VTS(s)	VMG2 VTS2(s)	Ver1.X PLAYER	Ver2.0 PLAYER
DISC including ONLY Ver 1.X TITLE	EXIST	/	ALL REPRODUCIBLE	ALL REPRODUCIBLE
DISC including ONLY Ver 2.0 TITLE	/	EXIST	UNREPRODUCIBLE	ALL REPRODUCIBLE
DISC including both Ver 1.X and Ver 2.0 TITLEs	EXIST	EXIST	ONLY Ver1.X TITLE REPRODUCIBLE	ALL REPRODUCIBLE

FIG. 18A

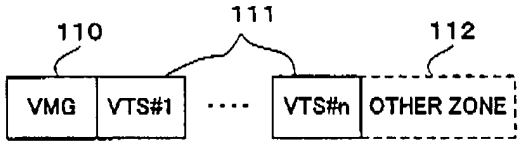

FIG. 18B

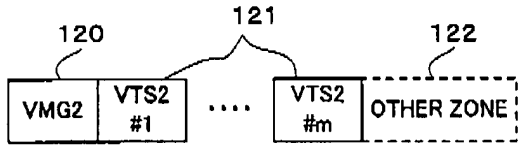
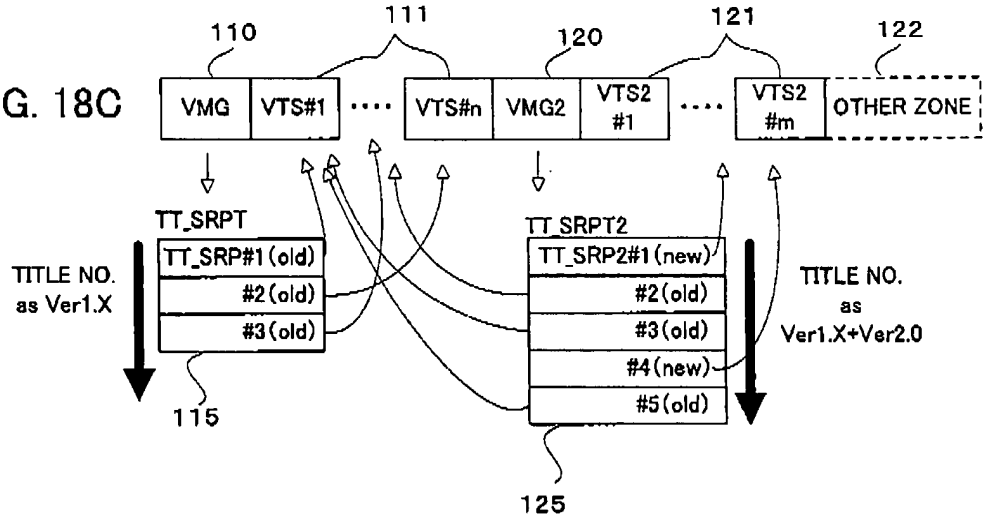
FIG. 18C